

Math Problem

To find the value of $f(-2 - g(3))$, we first need to compute $g(3)$.

Given $g(x) = x^2 - 3$, we can substitute $x = 3$:

$$g(3) = 3^2 - 3 = 9 - 3 = 6$$

Next, we calculate $-2 - g(3)$:

$$-2 - g(3) = -2 - 6 = -8$$

Now we need to find $f(-8)$. Given $f(x) = \frac{3}{4}x + 10$, we substitute $x = -8$:

$$f(-8) = \frac{3}{4}(-8) + 10$$

Calculating $\frac{3}{4}(-8)$:

$$\frac{3}{4}(-8) = -6$$

So,

$$f(-8) = -6 + 10 = 4$$

Thus, the value of $f(-2 - g(3))$ is

$$\boxed{4}$$